

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1586656

Luminaire Tested: 22CZSP-A-43HE-L840-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586656
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-6)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-A-43HE-L840-S
Description: 2x2 CZSP LED Luminaire, 4000K CCT and 4000 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

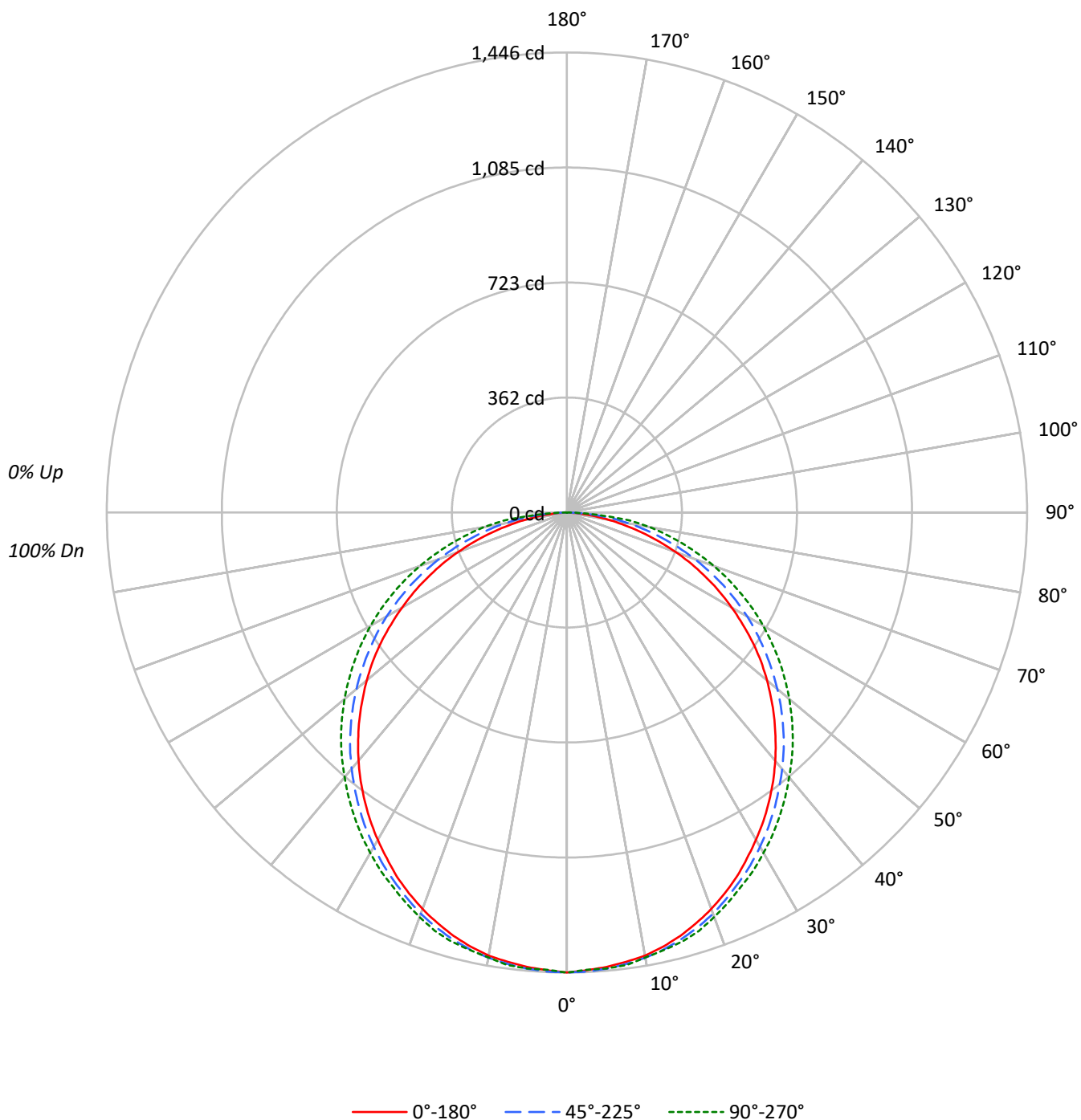
Lumens per Lamp: N/A
Luminaire Lumens: 4221.0 lumens
Efficiency: N/A
Efficacy: 149.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 28.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	108	103	99	95	106	101	97	93	97	93	90		93	90	88		89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62		71	65	61		69	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36	30	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4527	4527	4527
5°	4507	4524	4521
10°	4497	4518	4515
15°	4465	4501	4528
20°	4420	4472	4509
25°	4365	4426	4480
30°	4297	4387	4468
35°	4234	4344	4454
40°	4165	4301	4441
45°	4085	4257	4446
50°	3998	4205	4444
55°	3894	4146	4450
60°	3747	4101	4461
65°	3576	4022	4475
70°	3333	3909	4494
75°	2969	3754	4538
80°	2456	3574	4761
85°	1599	3226	4160

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4911 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.7	3.2
10°-20°	391.5	9.3
20°-30°	590.5	14.0
30°-40°	711.2	16.8
40°-50°	742.8	17.6
50°-60°	682.2	16.2
60°-70°	537.3	12.7
70°-80°	329.6	7.8
80°-90°	99.2	2.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1118.8	26.5
0°-40°	1830.0	43.4
0°-60°	3254.9	77.1
0°-90°	4221.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4221.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1446	1446	1446	1446	1446	
5°	1434	1436	1439	1444	1438	136
15°	1377	1380	1388	1397	1397	388
25°	1263	1266	1281	1297	1297	582
35°	1108	1113	1136	1160	1165	693
45°	922	933	961	995	1004	711
55°	713	726	760	802	815	637
65°	483	499	543	588	604	477
75°	245	265	310	359	375	260
85°	44	61	90	114	116	58
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1445.8	1445.8	1445.8	1445.8	1445.8
2.5°	1440.2	1443.0	1444.0	1444.9	1438.4
5°	1433.8	1435.6	1439.3	1444.0	1438.4
7.5°	1424.5	1426.4	1431.0	1437.5	1434.7
10°	1414.3	1415.2	1420.8	1425.4	1419.9
12.5°	1397.6	1400.4	1406.9	1410.6	1408.8
15°	1377.3	1380.0	1388.4	1396.7	1396.7
17.5°	1353.2	1356.9	1367.1	1378.2	1379.1
20°	1326.3	1329.1	1342.1	1353.2	1353.2
22.5°	1295.8	1299.5	1312.4	1324.5	1326.3
25°	1263.3	1266.1	1280.9	1296.7	1296.7
27.5°	1225.4	1230.9	1249.4	1265.2	1268.9
30°	1188.3	1193.0	1213.3	1232.8	1235.6
32.5°	1149.4	1155.0	1176.3	1197.6	1202.2
35°	1107.7	1113.3	1136.5	1159.6	1165.2
37.5°	1064.2	1070.7	1094.8	1121.6	1127.2
40°	1018.8	1026.2	1052.2	1080.9	1086.4
42.5°	970.7	980.9	1008.6	1038.3	1046.6
45°	922.5	932.7	961.4	994.7	1004.0
47.5°	871.6	883.6	913.2	948.4	958.6
50°	820.6	832.7	863.2	901.2	912.3
52.5°	768.7	780.8	812.3	852.1	864.1
55°	713.2	726.1	759.5	802.1	815.1
57.5°	655.8	672.4	707.6	751.2	764.1
60°	598.3	615.0	654.8	697.4	712.3
62.5°	541.8	557.6	598.3	643.7	659.5
65°	482.6	499.2	542.8	588.1	603.9
67.5°	424.2	440.9	484.4	531.6	548.3
70°	364.0	382.5	427.0	474.2	490.9
72.5°	303.8	323.2	368.6	416.8	432.5
75°	245.4	264.9	310.3	359.4	375.1
77.5°	188.0	209.3	253.8	303.8	318.6
80°	136.2	156.5	198.2	247.3	264.0
82.5°	87.1	104.7	146.3	192.7	204.7
85°	44.5	61.1	89.8	113.9	115.8
87.5°	13.9	19.5	29.6	44.5	45.4
90°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	16.72	18.39	17.09	18.70	19.02	17.56	19.22	17.92	19.53	19.85
	3H	18.48	19.99	18.86	20.31	20.67	19.67	21.18	20.05	21.50	21.86
	4H	19.10	20.52	19.50	20.87	21.24	20.56	21.98	20.96	22.33	22.70
	6H	19.51	20.83	19.92	21.19	21.58	21.34	22.66	21.75	23.03	23.42
	8H	19.62	20.88	20.04	21.27	21.67	21.66	22.92	22.09	23.31	23.71
	12H	19.67	20.88	20.10	21.26	21.69	21.87	23.08	22.30	23.46	23.89
4H	2H	17.50	18.92	17.89	19.27	19.64	18.14	19.57	18.54	19.91	20.29
	3H	19.47	20.67	19.88	21.07	21.47	20.50	21.70	20.91	22.09	22.49
	4H	20.21	21.30	20.64	21.71	22.14	21.55	22.64	21.98	23.05	23.48
	6H	20.74	21.69	21.19	22.13	22.58	22.50	23.45	22.96	23.89	24.35
	8H	20.89	21.78	21.34	22.22	22.68	22.90	23.79	23.36	24.23	24.70
	12H	20.97	21.77	21.45	22.25	22.72	23.18	23.98	23.66	24.45	24.92
8H	4H	20.67	21.56	21.13	22.00	22.47	21.84	22.73	22.30	23.17	23.64
	6H	21.33	22.08	21.82	22.56	23.04	22.95	23.70	23.44	24.18	24.66
	8H	21.54	22.21	22.05	22.71	23.20	23.46	24.13	23.97	24.64	25.12
	12H	21.68	22.27	22.19	22.76	23.32	23.85	24.44	24.35	24.93	25.49
12H	4H	20.76	21.56	21.24	22.04	22.51	21.86	22.67	22.34	23.14	23.61
	6H	21.46	22.13	21.97	22.64	23.12	23.00	23.67	23.50	24.17	24.66
	8H	21.74	22.33	22.25	22.82	23.38	23.58	24.17	24.08	24.66	25.22